SOBOLEVA, G.D.

Decomposistion of xylose during evaporation. Gidroliz. i lesokhim.prom. 10 no.5:15-16 '57. (MLRA 10:8)

1.Vsesoyuznyy nauchno-isslodovatel'skiy institut gidroliznoy i sul'fitno-spirtovoy rpomyshlennosti.
(Xylose) (Evaporation)

LEYKIN, Ye.R.; SOBOLEVA, G.D.

[Production of xylitol] Proizvodstvo ksilita. Moskva, TSentr. in-t tekhn. informatsii i ekon. issl. po lesnoy, bumazhnoi i derevoobrabatyvaiushchei promyshl., 1962. 62 p. (MIRA 16:9)

(Xylitol) (Wood--Chemistry)

LEYKIN, Ye.R.; SOBOLEVA, G.D.; MESHKOVA, V.Ya.

Solubility of sorbite and xylitol in water and alcohol. Sbor.trud. NIIGS 12:189-194 '64. (MIRA 18:3)

LIBERMAN, F.Ya.; VAL'KOVA, A.A.; DYLIS, K.Yu.; RYUMINA, L.A.; SOBOLEVA, G.I.; TUPOVA, V.V.; KHABUR, B.P., otv.red.; GUREVICH, G.Ye., kand.tekhn. nauk, nauchnyy red.; GOROBETS, V.A., kand.voyen.-morskikh nauk, red.; KOLODKIN, A.L., kand.yurid.nauk, red.

[Conditions for the commercial operation of the merchant marine during foreign sailing; rules, customs and practices in Japanese sea ports.] Usloviia kommercheskoi ekspluatatsii morskogo flota v zagranichnom plavanii; pravila, obychai i praktika morskikh portov IAponii. Leningrad, Izd-vo "Morskoi transport." No.10, pt.1. 1963. 90 p. (Leningrad. TSentral'nyi nauchno-issledovatel'skii institut morskogo flota, Informatsionnyi sbornik, no.93). (MIRA 17:2)

1. Sotrudnik sektora ekspluatatsii flota TSentral'noto nauchno-issledovatel'skogo instituta morskogo flota (for Liberman, Val'kova, Dylis, Ryumina, Soboleva, Tupova).

SOBOLEVA, G. M.

Fuel

2

Composition and property changes in bituminous coals
on oxidation and heating. A. I. Khrisanfova and G. N.
Soboleva. *Trudy Inst. Goryuch. Iskopaemykh, Akad.
Nauk S.S.S.R., Otdel. Tekh. Nauk* 6, 43-61(1956).—The
effects of heating to 350, 400, 450, and 500° and oxidation
with air for 168 hrs. at 140-150° of the heated and not previ-
ously heated coals were detd. with bituminous coals, semi-
anthracites, anthracites, and Siberian sapropelite. In the
oxidation tests, the CO_2 and H_2O production and the changes
in wt. after 72, 120, and 168 hrs. of heating were measured.
The coal-oxidation process depended on the coal structure
and compn. Coals can be sepd. into 2 classes from the
results of the oxidation test, i.e. coals in which the chem.
structure is changed by oxidation and coals which are simply
oxidized, with the formation of CO_2 and H_2O and change
in the sample wt. and elementary compn. The amts. of
CO_2 and H_2O set free by unheated coals differ materially
for coals in different stages of metamorphism. Most CO_2
and H_2O is evolved in the oxidation of long-flame coals,
the least by semianthracites and anthracites. Long-
flame coal heated to 350° was similar to gas coal in its
evolution of oxidation products and wetting properties.
Gas coal not previously heated to 350° evolved less CO_2
than did that after heating; the heating caused a break-
down into simpler structural units. The inner surface,
as measured by the heat of wetting, increased from 11 to 22
cal./g., i.e. the coal became more accessible to the action of
O. With higher coal preheating and greater structure com-
plexity, particularly preheating to 450-500°, the amts. of
oxidation products is reduced, which is indicated by the
structure of the coke produced. W. M. Sternberg

SOBOLEVA, G.N.

2

Fuel

1358. CHANGES OF COAL PROPERTIES IN OXIDIZING AND HEATING PROCESSES. Khrisanfova, A.I. and Soboleva, G.N. (Khim. Tekhnol. Topliva (Chem. Technol. Fuel, Moscow), 1956, (2), 45-54; abstr. in Chem. Abstr., 1956, vol. 50, 13404). Coking properties of some coals can be changed by oxidizing of strongly coking (fatty and coking kinds) coals or by light duty hydrogenation of weakly coking coals (long flame and lean kinds). The results of research work support the following facts: (1) light grade oxidation of coals of fatty or gas ranks with good fusibility and fluidity improves their coking properties in spite of slightly decreased coking abilities; (2) as a result of interaction between the coal organic matter and oxygen, some peroxide compounds and the products of their decomposition are formed; this leads to complication of the coal structure; (3) there is a change of composition of metamorphical series of various coal ranks (from long flame coals to lean coals and their mixtures) by heating within the 350-500° range; (4) heating the mixture of high volatile coals and low volatile coals results, in parallel to the physical process, in deep chemical changes (synthesis and decomposition, i.e., polymerization and condensation reactions) in the coal substance; (5) in the coke formation process (as above), a light fusible bituminous portion of the high volatile coals does not escape from reaction zone as volatile products, but, on the contrary, reacts with substance of the lean coals. C.A.

SOBOLEVA, G. N.

65-10-1/12

AUTHOR: Shubnikov, A.K., Soboleva, G.N., Bronovets, T.M. and Khrisanfova, A.I.

TITLE: The Application of Spectral Analysis for the Investigation of Coal Ashes (Primeneniye spektral'nogo analiza k issledovaniyu zoly iskopayemykh ugley)

PERIODICAL: Khimiya i Tekhnologiya Topliva i Masel, 1957, No.10, pp. 1 - 5 (USSR).

ABSTRACT: The application of spectral analysis for the determination of the composition of coal ashes using the experimental method developed for the quantitative analysis of clays (Ref.3) was tried. The method was tested for the analysis of coal ashes containing: SiO_2 in the range 3-55%; Al_2O_3 10-45%; Fe_2O_3 4-62%; CaO 0.4-20.0% and MgO 0.05-1.5%. The possibility of a more accurate and rapid analysis of coal ash for iron and aluminium oxides by the spectral method than by chemical methods was established. Mean deviations in the content of the individual ash components determined by spectral analysis from the data obtained by chemical analysis were within the limits of errors permissible for spectral analysis (1-10%). The absence of interference during the analysis of one element with another was confirmed. N. Sedov and P. Khodakovskiy participated in

Card 1/2

65-10-1/15

The Application of Spectral Analysis for the Investigation of Coal Ashes

the experimental part of the work. There are 5 tables and 8 references, of which 3 are Russian, 1 German, 1 Spanish and 3 English.

ASSOCIATION: IGI AN SSSR

AVAILABLE: Library of Congress

Card 2/2

SOV/24-58-11-38/42

AUTHORS: Soboleva, G. N. and Khrisanfova, A. I. (Moscow)

TITLE: On the Changes in the Micro-hardness of Coals Taken from the Oxidation Zone (Ob izmenenii mikrotverdosti ugley iz zony okisleniya)

PERIODICAL: Izvestiya Akademii Nauk SSSR, Otdeleniye Tekhnicheskikh Nauk, 1958, Nr 11, pp 138-142 (USSR)

ABSTRACT: It was established that the micro-hardness of brown and young hard coal increases during the initial stage of their oxidation. Increase of the micro-hardness of coals during oxidation is due to the fact that the carbon substance becomes more complex owing to the influence of oxygen during the reaction of oxidation pulverisation and polycondensation, the initiator and accelerator of which can be intermediate peroxidates which form and decompose to the greatest extent at the temperatures 60 and 80°C. In the case of storing of brown and of young hard coal until the temperature in the pile reaches the critical temperature of 60 to 80°C, the absolute value of the micro-hardness of the brown coal approaches that of the hard coals G, PZh and K in their initial state and the micro-hardness of gas coal approaches that of the older

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B.V.Semendeyev

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SOV/180-59-1-18/29

AUTHORS: Soboleva, G.N., Khrisanfova, A.I. (Moscow)

TITLE: On the Properties of Coals in the Oxidation Zone Determined from Data of their Change in Weight During Oxidation (O svoystvakh ugley zony okisleniya po dannym izmeneniya ikh vesa pri okislenii)

PERIODICAL: Izvestiya Akademii nauk SSSR, Otdeleniye tekhnicheskikh nauk, Metallurgiya i toplivo, 1959, Nr 1, pp 94-99 (USSR)

ABSTRACT: In the here-described investigations, the degree of oxidation of coals was judged from the continuously measured change in weight during oxidation in the process of continuous heating. For this purpose a method was developed in the IGI Laboratory of the Academy of Sciences of the USSR which is based on determining the change in weight of the coal during the process of oxidation, which differs from that published by V.F. Oreshko (Refs 8 and 9) by a number of design features. The change in the weight of the coal is measured by means of analytical electrical scales and not from the elongation of a quartz or a molybdenum spiral. The electrical scales were fitted with a photo-cell which detected the slightest changes in weight.

Card 1/4

SOV/180-59-1-18/29

On the Properties of Coals in the Oxidation Zone Determined from Data of their Change in Weight during Oxidation

The oxidation of the coal was effected inside an air current maintaining automatically a pre-determined heating speed. A sketch of the instrument is shown in Fig 1,p 95. Fig 2 shows a diagram of the weight increase of non-oxided coals as a function of the duration (minutes) of heating in an air current. The oxidation characteristics of the investigated coal specimens from the oxidation zone are entered in a table on page 97. By means of the here-described method it is possible to determine the degree of oxidation of hard coal from various oxidation zones in coal seams. It is shown that the degree of oxidation of coal can be judged from its change in weight during the oxidation process. It was established that the weight of heavily oxidised coals decreases continuously,after an initial increase in the temperature range of 25 - 50°C, and this is attributed to the release of oxidation products. It was established that for non-oxided and for weakly oxided hard coals, the weight of the coal increases approximately up to 50°C, then decreases, and at about 176°C it again increases to a certain limit, which

Card 2/4

coresponds to the beginning of combustion (temperature of the second maximum). It is shown that the change (decrease) in the temperature of this second maximum is a suitable criterion for distinguishing non-oxided coals from oxided ones for which an increase in weight can be observed in the range of the higher temperatures. For non-oxided coals the difference between the temperatures of the second maximum of the non-oxided and the oxided coals equals about 7°C, whilst for coals with minimum degrees of oxidation this value is about 35-45°C (the degree of oxidation according to the here-described method is expressed by the difference between the temperatures of the second maximum of the coal in the non-oxided and the oxided states). Increase in weight in the range of lower temperatures indicates that, very probably, peroxide type of oxygen compounds form. For coals of the medium stage of metamorphosis in the initial stage of their oxidation the temperature of the second maximum, which corresponds to the temperature of inflammation of the coal, does not decrease, but increases, and this is

SOV/180-59-1-18/29

On the Properties of Coals in the Oxidation Zone Determined from Data of their Change in Weight during Oxidation

attributed to a complication in the structure of the coal substance under the influence of oxygen. If the degree of oxidation increases further the decomposition temperature of these coals begins to decrease. B.V. Semendeyev participated in the experimental work.

Card 4/4

There are 2 figures, 1 table and 12 references, all Soviet.

SUBMITTED: June 9, 1958

KHRISANFOVA, A.I.; SOBOLEVA, G.N.; SEMENDEYEV, B.V.

Thermographic analysis in the study of the coals of the oxidation zone. Khim.i tekh.topl.i masel 5 no.4:33-39 Ap '60. (MIRA 13:6)

1. Institut goryuchikh iskopayemykh im. G.M.Krzhizhanovskogo AN SSSR.
(Coal--Thermal properties) (Oxidation)

KHRISANFOVA, A.I.; SOBOLEVA, G.N.

Oxidation zone coal. Truyd IGI 14:21-43 '60. (MIRA 13:12)
(Coal geology)

KHRISANFOVA, A.I.; GUSEV, R.P. [deceased]; SOBOLEVA, G.N.; TISLIN, T.S.

Inhibition of the coal oxidation process. Trudy IGI 14:108-117
'60. (MIRA 13:12)
(Coal) (Oxidation)

SOBOLEVA, G.N.

Certain properties of coal presenting the danger of outburst.
Trudy IGI 12:60-64 '61. (MIRA 14:3)
(Coal--Testing)

KHRISANFOVA, A.I.; SOBOLEVA, G.N.

Coal oxidation in seams during weathering. Trudy IGI 21:
69-87 '63. (MIRA 16:11)

KHRISANFOVA, A.I.; SOBOLEVA, G.N.

Determining elemental sulfur in oxidized coal. Trudy IGI 21: 169-174 '63. (MIRA 16:11)

SOBOL'EVA, G. S.

Q-2

USSR / Farm Animals. Cattle.

Abs Jour : Ref Zhur - Biol., No 14, 1958, No 64426

Author : Shilo, Yu. M.; Beletkov, M. P.; Sobol'eva, G. S.
Inst : Kurgan Agricultural Institute
Title : Materials for the Study of the Composition of the Milk of the Kurgan Breed of Cows.

Orig Pub : Sb. nauchn. rabot Kurgasnk. s.-kh. in-ta, 1956, vyp. 3, 211-217.

Abstract : The milk composition of cows of the Kurgan breed was studied
on 10 cows of three calvings, older than those in the herd
of the Institute. The production of cows was 3,600 kg., and
the fat content of the milk, 3.9%. The average composition
of milk during a lactatation was (in %): dry substances 12.05,
fat 3.84, protein 3.33, sugar 4.21-5.1, ash 0.664, calcium
1.184, carotene 1.879-2.247. Density of the milk was 29.84
A. Fat and dry matter content gradually increased toward

Card 1/2

KRUTENKO, Ye.G.; SOBOLEVA, I.

Experiment in producing an early potato crop. Biol. v shkole no.2:61-62 Mr-Ap '63. (MIRA 16:4)

1. Nizhnetagil'skiy pedagogicheskiy institut.
(Potatoes—Field experiments)

SOBOLEVA, I.B.

Acute hemocytosis in an 18-day-old child. Vop. okh. mat. i det. 5 no. 5:83-84 S-O '60. (MIRA 13:10)

1. Iz kafedry detskikh bolezney (zav. - prof. Ye.D. Belyayeva) Kalininskogo meditsinskogo instituta (dir. - dotsent A.N. Kushnev) i 2-y terapevticheskoy detskoy bol'nitsy (glavnyy vrach L.G. Perova).

(LEUKEMIA)

I. G.

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M. A. YOUTZ

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The light-scattering method of determining polymer structure in solutions in the presence of precipitants. I. G. Soboleva, N. V. Makletsova, and S. S. Medvedev. Doklady Akad Nauk S.S.S.R. 106, 303-6(1956).—The assumption is made that the characteristic mol. sizes of the linear and branched polymers differ in good and in poor solvents, because the globular polymer is denser than the linear one, and the linear size of the former is less. The mol. sizes of polystyrene (I), poly(methyl acrylate) (II), and poly-(acetyl acrylate) (III) were detd. in good solvents, and in the presence of alcs. as coagulants, in amts. insufficient for pptn. The size of the mol. globule of II differed most from an ideal twisted chain, and of III the least. The mean mol. size near the pptn. point is thus a parameter characterizing the mol. structure of the polymers, and it permits a qual. estn. of branching. W. M. Sternberg

Chem

PM

SOBOLEVA, I.M.

RT-873 (Chemistry of titanium. XIII. Separation of titanium dioxide from sulfuric acid solutions) K khimii titana. XIII. O vydelenii dvuokisi titana iz sernokislykh rastvorov. ZHURNAL PRIKLADNOI KHIMII, 12(2): 226-233, 1939.

PAMFILOV, A. V., [illegible], [illegible], SOLOCHEVA, I. N.

Titanium Sulfate

Sulfate solutions of tetravalent titanium. Part 19. Zhur. prikl. khim. 20, No. 1, '47.

Monthly List of Russian Accessions, Library of Congress
June 1953. UNCL.

USSR / Soil Science Tilling. Melioration. Erosion. J

Abs Jour : Ref Zhur - Biologiya, No 11, 1958, No. 48688

Author : Soboleva, I. M.; Pel'tikhin, S. V.
Inst : Voroshilov Agricultural Institute
Title : Changes in the Composition of Water-Soluble Soil Salts in Some Districts of Voroshilovgradskaya Oblast' in the Irrigation with Mine Waters

Orig Pub : Nauchn. Zap. Voroshilovgradsk. s.-kh. in-ta, 1956, 4, No 1, 49-53

Abstract : Mine waters utilized for the irrigation of agricultural crops have a solid residue of 1360-2624 mg/l (about 300 mg of Cl 470-1200 mg of sulphate-ion and 172-320 mg of hydrocarbonate-ion). By the end of the irrigation period, the chernozem soils irrigated with these waters are slightly saline with the Cl content

Card 1/2

USSR / Soil Science Tilling. Melioration. Erosion. J

Abs Jour : Ref Zhur - Biologiya, No 11, 1958, No. 48688

of 0.01-0.027%. During the fall-winter period the concentration of chlorine decreases to 1/8-1/12, and the content of sulphate-ion to 1/2-1/3. The bicarbonate-ion content does not exceed 0.025-0.035%. With regard to the water soluble salts content the irrigated soils have no harmful effect on the agricultural crops. -- S. A. Nikitin

Card 2/2

55

SOBOLEVA, I.M., kand. tekhn. nauk; PEL'TIKHIN, S.V., kand. tekhn. nauk

Using mine water for industrial purposes. Ugol' 39 no.3:
75-76 My'64. (MIRA 17:5)

1. Kommunarskiy gornometallurgicheskiy institut.

SOBOLEVA, I.M., kand.tekhn.nauk (Kommunarsk); PEL'TMAN, S.V., kand.tekhn. nauk (Kommunarsk); DEMURA, A.A., inzh. (Kommunarsk)

Using the overflow waters of coal mines for technical and everyday household water supply. Vod. i san. tekh. no.10:37-38 O '64. (MIRA 18:3)

Soboleva, I. M.

GREBENNIK, L.I.; SOBOLEVA, I.M.

Studies on excretion and distribution of tiphen in the body by using the radioisotope method. Farm. i toks. 19 no.5:50-53 S-O '56. (MLRA 10:3)

1. Otdel khimioterapii (zav. - prof. G.N.Pershin) Vsesoyuznogo nauchno-issledovatel'skogo khimiko-farmatsevticheskogo instituta imeni S.Ordzhenikidze.

(MUSCLE RELAXANTS, metabolism,
thiodiphenyl acetic acid beta-diethylaminoethyl ester HCl, excretion & distribution of labeled prep. (Rus))

GREBENNIK, L.I.; SOBOLEVA, I.M.

Effect of phthivazid on the ascorbic acid content of animal organs. Farm. i toks. 20 no.1:66-71 Ja-F '57. (MIRA 10:7)

1. Otdel khimioterapii (zav. - prof. G.N.Pershin) Vsesoyuznogo nauchno-issledovatel'skogo khimiko-farmatsevticheskogo instituta imeni S.Ordzhonikidze.

(VITAMIN C, metabolism,
eff. of nicotinic acid isomers (Rus))
(NICOTINIC ACID ISOMERS, effects,
on vitamin C metab. (Rus))

GREBENNIK, L.I., SOBOLEVA, I.M.

Effect of phthivazid and tubazid on urinary excretion of neutral 17-ketosteroids [with summary in English]. Farm. i toks. 21 no.5:63-67 S-O '58 (MIRA 11:11)

1. Otdel khimioterapii (zav. - prof. G.N. Pershin) Vsesoyuznogo nauchno-issledovatel'skogo khimiko-farmatsevticheskogo instituta im. S.Ordzhonikidze.

(NICOTINIC ACID ISOMERS, eff.
on urinary 17-ketosteroids (Rus))
(TEROIDS, inurine,
eff. of nicotinic acid isomers (Rus))

GREBENNIK, L.I., SOBOLEVA, I.M., SHAKHNAZAROVA, N.G.

Comparative effects of isonicotinic acid hydrazide derivatives on the development of young animals with dietary vitamin B6 deficiency [with summary in English]. Biul.eksp.biol. i med. 45 no.5:45-50 My '58 (MIRA 11:6)

1. Iz otdela khimioterapii (zav. - prof. G.N. Pershin) i otdela farmakologii (zav. - prof. M.D. Mashkovskiy) Vsesoyuznogo nauchno-issledovatel'skogo khimiko-farmatsevticheskogo instituta imeni S. Ordzhonikidze, Moskva. Predstavlena deystvitel'nym chlenom AMN SSSR S.Ye. Severinym.

(NICOTINIC ACID ISOMERS, effects,
  on growth of young rats in vitamin B6 defic., comparison of various prep. (Rus))
(VITAMIN B6 DEFICIENCY, experimental,
  eff. on growth of various isonicotinic acid hydrazides in young rats (Rus))
(GROWTH, effect of drugs on,
  isonicotinic acid hydrazides in vitamin B6 defic. young rats (Rus))

GREBENNIK, L.I.; SOBOLEVA, I.M.

Study of the distribution of tibione in the separate components of the blood by means of the isotope method. Khim.i med. no.11: 110-112 '59. (MIRA 13:6)

(ACETANILIDE)

GREBENNIK, L.I.; SOBOLEVA, I.M.

Study of the absorption and excretion of cutisone by the animal organism by means of the isotope method. Khim.i med. no.11:112-115 '59. (MIRA 13:6)

(CUMALDEHYDE)

SOBOLEVA, I.M.; FEL'TIKHIN, S.V.

Some characterisitcs of the alteration and formation of the chemical composition of mine waters in the northeastern part of the Donets Basin. Sov. geol. 8 no.6:160-164 Je '65.

(MIRA 18:8)

1. Gorno-metallurgicheskiy institut, g. Kommunarsk.

Soboleva, [redacted], I. N.

2

Chem

The breakdown of solid solutions in thin plates. M. I. Zakharova and I. N. Soboleva (M. I. Kalinin Inst. Non-Ferrous Metals and Gold, Moscow). *Doklady Akad. Nauk S.S.S.R.* 108, 841-2(1956).—The existence of some crit. plate thickness, below which solid solns. would break down differently than in thicker specimens seemed probable from results obtained by Bulnov and Lerinman (*C.A.* 46, 1945*b*) on phase transformations proceeding differently on the alloy surface and on its inside. Samples of a Cu solid soln. in Al were prepd. 0.4, 0.02, and 0.004 mm. thick, and annealed at 180, 200, 220, 240, 260, 280, and 300°, and the lattice consts. of the 0.02 and 0.004-mm. specimens were different after annealing at 260 and 280° from the consts. of the 0.4-mm. samples after the same heat treatment and, indicated the presence of areas of different degree of supersatn. in the thinner samples. After annealing at above 280°, x-ray measurements showed that solid-soln. areas with equiv. satn. predominated in all the samples. Similar differences of behavior were also observed in 70 Al-30 Zn and 90 Al-10 Mg samples of different thicknesses. W. M. Sternberg

SOBOLEVA, I.P.

Carriage of pathogenic staphylococci among hospital personnel.
Antibiotiki 8 no.9:843-844 S '63.

(MIRA 17:11)

69330

S/129/60/000/05/003/023
E193/E283

18.7100

AUTHORS: Bessonov, V. D., Kozochkina, Ye. S., and Soboleva, K. G

TITLE: Reducing the Distortion of Semi-Fabricated Sections and Components of Alloy V95 During Quenching

PERIODICAL: Metallovedeniye i termicheskaya obrabotka metallov, 1960, Nr 5, pp 11-15 (USSR)

ABSTRACT: Components, made of the high-strength aluminium alloy V95, tend to distort during quenching, the degree of the distortion depending on the quenching conditions and the shape and size of the component. The object of the present investigation was to establish conditions under which the distortion would be reduced to minimum, either by changing the rate of quenching (by varying the temperature of the quenching medium), or by the application of anodizing process. The experiments were carried out on ring specimens of the shape, shown in Fig 1a, and on lengths of extruded T-section, illustrated in Fig 1b; both specimens were made of the alloy V95M; the variation of the dimension A (slot width) was taken as the measure of distortion of the ring specimen and the depth of the curvature in the case of T-shaped

Card 1/7

69330

S/129/60/000/05/003/023
E193/E283

Reducing the Distortion of Semi-Fabricated Sections and Components of Alloy V95 During Quenching

specimens. A nitrate bath was used for heating the specimens, which were quenched from 465 to 480°C in water whose temperature varied between 20 and 90°C. The results are reproduced in Fig 2, where the distortion (mm) is plotted against the temperature of the quenching medium (°C), graphs a and b relating to the ring and T-shaped specimens, respectively. It will be seen that significant reduction in the degree of distortion was attained only when the temperature of the quenching medium was raised to 80°C, and the object of the next series of experiments was to check to what extent the mechanical properties of the alloy would be affected by the variation of the temperature of the quenching medium. The alloy (V95), used in these experiments, contained 5.7% Zn, 0.41% Mn, 2.75% Mg, 2% Cu, 0.55% Si, 0.17% Cr, 0.23% Fe, the remainder Al. The specimens, measuring 135 x 80 x 60 mm, and prepared from extruded material, were quenched from 465 to 480°C and then aged at 135 to 145°C for 16 h, after which mechanical tests

Card 2/7

69330

S/129/60/000/05/003/023
E193/E283

Reducing the Distortion of Semi-Fabricated Sections and Components of Alloy V95 During Quenching

were carried out on test pieces, cut out from the central portion of the heat-treated specimens. The results are reproduced in Fig 3, where UTS (kg/mm^2, left-hand scale, continuous curve) and elongation (%, right-hand scale, broken curve) are plotted against the temperature (°C) of the quenching water; the upper and lower horizontal lines on these graphs show the T-Ch specification limits for UTS and elongation, respectively. It will be seen that the mechanical properties of the alloy were unaffected by raising the temperature of the quenching water up to 70°C; further increase in the temperature of the quenching medium resulted in a rapid decrease of UTS, attributed to partial decomposition of the solid solution during quenching. This was confirmed by metallographic examination, the results of which are reproduced in Fig 4, showing the micro-structure of alloy V95 quenched in water at (a) 70 and (b) 95°C. The rapid decrease of UTS of the alloy, brought about by raising the temperature of the quenching water to 80°C, rendered this method of reducing distortion impracticable; however, it is known

Card 3/7

69330

S/129/60/000/05/003/02
E193/E283

Reducing the Distortion of Semi-Fabricated Sections and Components of Alloy V95 During Quenching

that hardenbility and age-hardening characteristics of aluminium alloys can be improved by anodizing treatment and it was just possible that by using this expedient, the alloy could be quenched in water at 80°C without losing its strength. This problem was studied in the next series of experiments, in which specimens (40 x 90 x 180 mm) of alloy V95 were used. After quenching and ageing for 16 h at 135 to 140°C, hardness measurements were taken on the cross-sections of the specimens at points situated (1.5 mm apart) on the line joining the surface and the centre of the specimens. The results are reproduced in Fig 5, where hardness (Rockwell B) of the heat-treated specimens is plotted against the temperature (°C) of the quenching water, curves 1, 2, 3 and 4 relating to specimens with the thickness of the anodized film equal 50, 10, 5, and 0 microns, respectively; the horizontal line on this graph indicates the T-Ch specification limit for hardness of the investigated alloy. It will be seen that hardness of both anodized

Card 4/7

69330

S/129/60/000/05/003/023
E193/E283

Reducing the Distortion of Semi-Fabricated Sections and Components of Alloy V95 During Quenching

and untreated specimens was hardly affected by the variation of the temperature of the quenching water up to 80°C. However, above that temperature the hardness of untreated specimens fell sharply, whereas that of the anodized material decreased only by a negligible amount. The effect of anodizing on the distortion of T-shaped specimens was studied next. The results are reproduced in Fig 6, where the degree of distortion (mm) due to quenching is plotted against the temperature (°C) of the quenching water, graphs a and b relating to untreated and anodized specimens respectively. It was found that the anodizing treatment had practically no effect on the degree of distortion during quenching; the degree of distortion of both anodized and untreated material decreased by a factor of 4 after raising the temperature of the quenching water from 20 to 80°C. To check the results obtained on small specimens, the experiments were repeated on large panels (both anodized and untreated) of the same alloy, measuring 1700 x 662 x 8 mm. The results are reproduced in Fig 7,

Card 5/7

69330

S/129/60/000/05/003/023
E193/E283

Reducing the Distortion of Semi-Fabricated Sections and Components of Alloy V95 During Quenching

showing the degree of warping (mm, + or -) of anodized (a) and untreated (b) panels, heated and quenched under various conditions. Reading from left to right, the results relate to panels quenched in water at 20°C (first three graphs), 70°C (the next three graphs) and 75°C (the last graph); Nos 1, 2 and 3 relate to panels:
1 - heated in the horizontal position and dropped into the quenching tank from a height of 1.5 to 2 m;
2 - heated in the vertical position and dropped into the quenching tank; 3 - heated in the horizontal position and immersed in the quenching tank with the aid of a hoist. On the basis of the results obtained, the following procedure was recommended for heat-treating components made of alloy V95: (a) preliminary anodizing of the components to produce a surface oxide layer 5 to 50 microns thick; (b) heating the components to 465 to 480°C; (c) quenching in water at 80 to 85°C;
(d) ageing at 135 to 145°C for 16 h; (e) removing

KUZNETSOVA, T.V.; SOBOLEVA, K.L.

Effect of iron oxides in clinkers upon the strength of cement during steaming. TSement 29 no.5:14-15 S-O '63.
(MIRA 16:11)

1. Sterlitamakskiy tsementnyy zavod.

LYAKHOVICH, K.G.; SOBOLEVA, K.P.; STARIKOVA, K.S.; TARKOV, M.I.;
CHERNYAVSKAYA, K.M.; SHOR, R.S.

Causes of the low survival rate of diphtheria bacteria. Zdravookhranenie 3 no.2:29-33 Mr-Ap '60. (MIRA 13:7)

1. Iz Moldavskogo instituta epidemiologii, mikrobiologii i gigiyeny (direktor N.N. Yezhov) i infektsionnoy bol'nitsy g. Kishineva (glavnyy vrach Z.P. Kiseleva).
(DIPHTHERIA--BACTERIOLOGY)

MOSKOVKO, G. I., SOBOLEVA, K.P., SHPRITSMAN, M.L.

Sanitary and hygienic conditions in the exploiting of the Dniester River water supply. Zdravookhranenie 4 no.3:52-56 My-Je '61. (MIRA 16:7)

1. Iz Moldavskogo instituta epidemiologii, mikrobiologii i gigiyeny (dir. N.N.Yezhov).

(KISHINEV--WATER SUPPLY)
(DNIESTER RIVER--WATER--PURIFICATION)

SOBOLEVA, K.P.

Survival in the soil of various species of Cl. perfrigens.
Zdravookhranenie 4 no.5:52-54 S-O '61. (MIRA 14:11)

1. Iz Moldavskogo instituta epidemiologii, mikrobiologii i gigiyeny (direktor kand.med.nauk N.N.Yezhov).
(CLOSTRIDIUM PERFRIGENS)

SOBOLEVA, K.P.; TARKOV, M.I.

Reproduction of Clostridium perfringens in the soil. Trudy MIEMG no.5:23-34 '61. (MIRA 15:9)
(CLOSTRIDIUM) (SOILS--MICROBIOLOGY)

SOBOLEVA, K.P.

Observation of the vital activity of vegetative forms of Clostridium perfringens in the soil. Trudy MIEMG no.5:35-42 '61.
(MIRA 15:9)

(CLOSTRIDIUM) (SOILS--MICROBIOLOGY)

SOBOLEVA, K.P.

Distribution of vegetative forms of Clostridium perfringens on some objects in the external environment. Trudy MIEMG no.5:43-52 '61. (MIRA 15:9)
(CLOSTRIDIUM) (SOILS--MICROBIOLOGY)

BORZOVA, L.D.; TORINA, I.V.; ASTAF'YEVA, N.G.; GALLYAMOV, V.M.; SOBOLEVA, L.A.

Determination of vanadium in mazut. Energotekh. ispol'. topl. no.2:192-198 '62. (MIRA 16:5)
(Mazut--Analysis) (Vanadium--Analysis)

VINOKUR, I.L.; KAZAKOVA, L.S.; PORUS, Yu.A.; SOBOLEVA, L.A.

Sanitary and hygienic evaluation of mass independent housing construction. Uch. zap. Mosk. nauch.-issl. inst. san. i gig. no.6:89-90 '60. (MIRA 14:11)

(HOUSING--SANITATION)

SOBOLEVA, L.D.

Electroconductivity of some granular drugs. Apt. delo 12 no.5: 23-24 S-O'63 (MIRA 16:11)

1. Pervyy Moskovskiy ordena Lenina meditsinskiy institut imeni Sechenova.

*

[illegible]

Dielectric constant of medicinal granules and a device for express measurement of their moisture. Apt. delo 13 no.1:22-24 Ja-F '64. (MIRA 17:4)

1. I Moskovskiy ordena Lenina meditsinskiy institut imeni Sechenova.

ROZENBERG, G.I., kand.med.nauk; PEKAR', P.P., kand.med.nauk;
ZELENKO, Ye.F., kand.med.nauk; SOBOLEVA, L.I., nauchnyy sotrudnik;
LUCHINSKAYA, L.V., nauchnyy sotrudnik

Treatment of pulmonary tuberculosis with metazid and larusan.
Pat.,klin.i terap.tub. no.8:126-130 '58. (MIRA 13:7)

1. Iz Kiyevskogo i Odesskogo nauchno-issledovatel'skikh institutov tuberkuleza.
(TUBERCULOSIS) (ISONICOTINIC ACID)

POMOSOV, A.V.; SAKHAROVA, V.M.; Prinimali uchastiye: GOLIKOV, N.A.;
SOBOLEVA, L.L.; FIKS-SHIMEL', R.V.; LEBEDKIN, A.A.

Balance of the voltage of cell in producing powdered copper.
Trudy Ural. politekh. inst. no.94:65-69 '60. (MIRA 15:6)
(Powder metallurgy) (Copper)

SOBOLEVA, L. V

AUTHORS: Soboleva, L. N., (Deceased) 76-1-7/32
Kiselev, A. V.

TITLE: The Adsorption of Methanol Vapors on the Hydrated Surface of Silica Gels and Quartz (Adsorbtsiya parov metanola na gidratirovannoy poverkhnosti silikageley i kvartse).

PERIODICAL: Zhurnal Fizicheskoy Khimii, 1958, Vol. 32, Nr 1, pp. 49-57 (USSR)

ABSTRACT: The isotherms of the adsorption of methanol vapors of 12 samples of silica of different porosity are compared. The absolute isothermal line of the adsorption of great-pore samples is defined exactly and it is compared with the absolute isothermal line of the adsorption of steam. The pore measurements are determined, at which a distortion of the methanol adsorption isothermal lines is noticeable. Isothermal lines for the absolute magnitudes of the adsorption α are graphed for quartz and 5 great-pore silica gels. For the purpose of explaining the influence of the narrowing of pores with the residual 6 samples (silica gel) the method for the construction of reduced adsorption isothermal lines (ref. s 18,4 and 10) was used. The authors showed that a narrowing of the silica gel pores below d = 30 Å noticeably

Card 1/3

The Adsorption of Methanol Vapors on the Hydrated Surface 76-1-7/32
of Silica Gels and Quartz

increases the methanol vapor adsorption. This stimulating effect of the narrowing of pores, i.e. the approach of primary particles, on the energy of methanol adsorption shows in a much smaller scale than in the case of hydrocarbon vapor adsorption with hydrocarbons with 4 and more carbon atoms within a molecule (ref. 19) and is close to the corresponding effect in the case of the adsorption of nitrogen vapors (ref. 20). Contrary to the adsorption of steam (ref. 3) the increase of adsorption energy is clearly visible here. This is mainly due to the increase of the dispersion interactions with silica gel of the methyl group of methanol. The authors show that the isothermal lines of primary adsorption of methanol vapors can be used for a reliable determination of the specific surface of hydrated silica gels with pore measurements of $d > 30$ Å at room temperature. In the case of fine-porous silica gels this determination becomes unreliable. The authors further show that the process of adsorption of methanol vapors on a hydrated silica gel surface, is very similar to that of the adsorption of water vapour and that it is mainly determined by the hydrogen com-

Card 2/3

USSR/ Physics

Card 1/1 Pub. 43 - 10/11

Authors : Soboleva, L. N.

Title : On the possibility of studying micro-fields of magnetic materials with the help of an electron microscope

Periodical : Izv. AN SSSR ser. fiz. 18/4, 511-518, Jul - Aug, 1954

Abstract : The possibility of using an electron microscope for studying micro-fields of magnetic materials is discussed. A method based on the determination of of distortions of the shadow of the electron microscope net was used in the experiments to establish the possibility of such a method. It was proved, that a magnetic field of 600G's can be detected at a magnet particle of 10μ (effective length) and a field of 60 G's at one of 100μ (of effective length) Two USA references (1949). Diagrams; illustrations.

Institution : V. M. Molotov Energetics Institute at Moscow

Submitted : August 19, 1954

SOKOLOVA, N. I.

"An Electron-Optical Method of Investigating the Micropoles of Magnetic Materials." Cand Tech Sci, Moscow Order of Lenin Power Engineering Inst imeni V. M. Molotov, 17 Dec 54. (VM, 8 Dec 54)

Survey of Scientific and Technical Dissertations Defended at USSR Higher Educational Institutions (12)
SO: Sum. No. 556, 24 Jun 55

(3)

AUTHORS: Polivanov, K. M., Kolli, Ya. N., Soboleva, L. P.

SOV/48-23-3-8/34

TITLE: Permeability and Losses of Magnetodielectrics (Pronitsayemost' i poteri magnetodielektrikov)

PERIODICAL: Izvestiya Akademii nauk SSSR. Seriya fizicheskaya, 1959, Vol 23, Nr 3, pp 311-317 (USSR)

ABSTRACT: It is known (Ref 1) that the measured apparent loss angle tangent tg δ_{μ} within the Rayleigh limit of the field depends on the potential amplitude of the field N_t and on the frequency ω :

$$\mathrm{tg}\ \delta_{\bar{\mu}} = a_o + a_1 N_t + a_2 \omega$$

In the present paper these components were analyzed at a sinusoidal change of the field and at relatively low frequency. The problem of the derivation of the formulas which connects the average permeability of the magnetodielectric with magnetic permeability of the ferromagnetic phase at a sinusoidal change of the field was investigated already in detail (Refs 6, 7 and 8). At a weak concentration all these

Card 1/3

formulas yield similar results. In the present paper the generalization was made according to the formula by Lichtenecker

$$\mu = \mu^{p}_{equiv} = |\mu_{equiv}|^{p} e^{jp\delta}$$

for small angles $tg\delta_{\mu} = p\, tg\delta_{equiv}$ may be written instead of $\delta_{\mu} = p\delta_{equiv}$. $tg\delta_{\mu}$ consists of the same components as $p\, tg\delta_{equiv}$ each of them, however, being changed p times. On the basis of the analysis carried out the following method for the division of the losses may be suggested: 1) $tg\delta_{\mu} = f(\omega)$ is taken at N_t = const (Figure). 2) The experimental curve is extrapolated to $\omega = 0$. The section on the axis of ordinates which is separated by the curve is equated at corresponding N_t value to the hysteresis loss angle. 3) From the kown μ_n (initial permeability), μ_1, r (radius of the spherical particle), p (duty factor), a, b (diameter of the toroid) and individually measured σ and σ. the eddy current losses are computed as linear frequency functions. 4) The loss angle of magnetic viscosity is determined as the difference between

Card 2/3

the experimental curve and the sum of the hysteresis losses and the eddy current losses. 5) A family of curves $tg\delta_{\bar{\mu}} = f(\omega)$ for different N_t is necessary for the division of the angular targent of the hysteresis losses into the initial component a_0 and the Rayleigh component which depends on $N_t (a_1 N_t)$. By extrapolating them to $\omega = 0$ and by plotting the curve $tg\delta_{\bar{\mu}} = \varphi N)$ at $\omega \longrightarrow 0$ the section which was separated by the drawn straight line on the axis of ordinates is found. The section is equal to a_0 and the inclination of the straight line determines the quantity a_1. There are 1 figure and 10 references, 7 of which are Soviet.

ASSOCIATION: Moskovskiy energeticheskiy institut (Moscow Institute of Power Engineering)

Card 3/3

SOBOLEVA, L.P.

PHASE I BOOK EXPLOITATION SOV/4893

Vsesoyuznoye soveshchaniye po fizike, fiziko-khimicheskim svoystvam ferritov i fizicheskim osnovam ikh primeneniya. 3d, Minsk, 1959

Ferrity; fizicheskiye i fiziko-khimicheskiye svoystva. Doklady (Ferrites; Physical and Physicochemical Properties. Reports) Minsk, Izd-vo AN BSSR, 1960. 655 p. Errata slip inserted. 4,000 copies printed.

Sponsoring Agencies: Nauchnyy sovet po magnetizmu AN SSSR. Otdel fiziki tverdogo tela i poluprovodnikov AN BSSR.

Editorial Board: Resp. Ed.: N. N. Sirota, Academician of the
Academy of Sciences BSSR; K. P. Belov, Professor; Ye. I. Kondor-
skiy, Professor; K. M. Polivanov; Professor; R. V. Teleanin, Pro-
fessor; G. A. Smolenskiy, Professor; N. N. Shol'ts, Candidate of
Physical and Mathematical Sciences; S. M. Smolyarenko; and
L. A. Bashkirov; Ed. of Publishing House: S. Kholyavskiy; Tech.
Ed.: I. Volokhanovich.

PURPOSE: This book is intended for physicists, physical chemists, radio electronics engineers, and technical personnel engaged in the production and use of ferromagnetic materials. It may also be used by students in advanced courses in radio electronics, physics, and physical chemistry.

COVERAGE: The book contains reports presented at the Third All-Union Conference on Ferrites held in Minsk, Belorussian SSR. The reports deal with magnetic transformations, electrical and galvanomagnetic properties of ferrites, studies of the growth of ferrite single crystals, problems in the chemical and physicochemical analysis of ferrites, studies of ferrites having rectangular hysteresis loops and multicomponent ferrite systems exhibiting spontaneous rectangularity, problems in magnetic attraction, highly coercive ferrites, magnetic spectroscopy, ferromagnetic resonance, magneto-optics, physical principles of using ferrite components in electrical circuits, anisotropy of electrical and magnetic properties, etc. The Committee on Magnetism, AS USSR (S. V. Vonsovskiy, Chairman) organized the conference. References accompany individual articles.

Ferrites (Cont.) SOV/4893

Soboleva, L. P., and Ya. N. Kolli. Dynamics of the Reversal of Magnetization of a Ferrite Bar With a Rectangular Cross Section 364

Brin, I. A., G. P. Lisitsyn, and Yu. M. Shamayev. The Surface Effect in a Ferrite Plate With Rectangular Hysteresis Loop 377

Shamayev, Yu. M. Stability of Particular Cycles and "Accomodation" During Pulsed Reversal of Magnetization of Ferrites With Rectangular Hysteresis Loop 386

Shamayev, Yu. M., A. I. Pirogov, and V. P. Belyavskiy. Pulsed Reversal of Magnetization of Ferrites With Rectangular Hysteresis Loop 391

Rabkin, L. I., and B. Sh. Epshteyn. Ferrites With Rectangular Hysteresis Loop in Weak Fields 401

Card 12/18

Card 4/18

RODKEVICH, L.V.,; KOVALEVA, R.V.,; SOBOLEVA, L.S.

Parathyroid infections in rodents in a large city. Zhur. mikrobiol., epid. i immun. 27 no.1:96-110 Ja '56 (MIRA 9:5)

(MICE, diseases,
paratyphoid fevers in large cities (Rus))
(RATS, diseases,
same)
(PARATYPHOID FEVER, epidemiology
in mice & rats in large cities (Rus))

VOSKRESENSKAYA, N.T.; SOBOLEVA, L.T.

More on thallium in manganese minerals. Geokhimiia no. 3:276-278 '61. (MIRA 14:4)

1. Moskovskiy gosudarstvennyy universitet im. M.V. Lomonosova, Geologicheskiy fakul'tet, kafedra geokhimii.
(Dzhezdinskiy—Manganese ores) (Thallium)

ACCESSION NR: AT4028336 S/0000/63/000/000/0169/0176

AUTHOR: Soboleva, I. V.; Makarov, S. Z. (deceased)

TITLE: Peroxide compounds of certain rare earth elements

SOURCE: Soveshchaniye po khimii perekisny*kh soyedineniy. Second, Moscow, 1961. Khimiya perekisny*kh soyedineniy (chemistry of peroxide compounds); Doklady* soveshchaniy. Moscow, Izd-vo AN SSSR, 1963, 169-176

TOPIC TAGS: peroxide compound, rare earth element, lanthanide, cerium, erbium, samarium, hydrogen peroxide, ammonia

ABSTRACT: In this paper the authors discuss the broad application and importance of rare-earth elements and their compounds in science and industry, and describe a study on peroxide compound of rare earth. The following methods of investigation were used in the study of peroxide compounds of the cerium group of lanthanides, the yttrium group and the rare-earth analogs. 1) the residue method; 2) the preparative method of synthesis from rare-earth salt solutions; 3) determining the thermostability of rare-earth peroxide compounds by means of the differential thermal analysis method. According to bibliographic data, rare-earth peroxide compounds can be expressed by the formula $Ln_2O_5 \cdot xH_2O$ and for Ce(IV) in elements of the titanium subgroup $MeO_3 \cdot 2H_2O$.

Card 1/2

ACCESSION NR: AT4028336

The physical chemical investigation of the reaction of rare-earth hydroxides with hydrogen peroxide and rare-earth nitrates with ammonia and hydrogen peroxide produce compounds of the empirical composition $Ln_2O_5 \cdot xH_2O$ which during prolonged dessecation changed into $Ln_2O_4 \cdot xH_2O$. Cerium forms $CeO_3 \cdot 2H_2O$. Orig. art. has: 3 tables and 6 figures.

ASSOCIATION: Institut obshchey i neorganicheskoy khimii im. NS Kurnakova AN SSSR (Institute of General and Inorganic AN SSSR)

SUBMITTED: 13Dec63 DATE ACQ: 06Apr64 ENCL: 00

SUB CODE: CH NO REF SOV: 020 OTHER: 016

Card 2/2

L 21821-65 EPF(c)/EPF(n)-2/EPR/EPA(s)-2/EPA(w)-2/EWT(m)/EWP(j)/EPA(bb)-2/EWP(b)/
T/EWP(e) Pc-4/Pq-4/Pr-4/Ps-4/Pt-10/Pu-4/Pab-10 AFWL/SSD/AFETR/RPL GG/RM/WH/WM
ACCESSION NR: AP5004427 S/0026/64/000/009/0065/0069

B

AUTHOR: Soboleva, L. V. (Candidate of chemical sciences); Gribkova, P. N. (Moscow)

TITLE: Present state and future of chemistry

SOURCE: Priroda, no. 9, 1964, 65-69

TOPIC TAGS: chemical conference, chemistry, chemical engineering

ABSTRACT: The most important scientific achievements of Soviet chemistry were represented at the chemistry pavilion of the Academy of Sciences SSSR at the Exposition of Achievements of the National Economy. The following is a list of organizations which participated and the subjects of their exhibits.

1) Institute of Organoelemental Compounds, Academy of Sciences SSSR. Tautomerism and reactivity of tautomeric forms; chemistry of fluoro organic compounds; chemistry of macromolecular compounds, with emphasis on poly(aryl carbonates).

2) Institute of Organic Chemistry im. N. D. Zelinskiy, Academy of Sciences SSSR. Stereochemistry of organic reactions.

Card 1/3

13

L 21821-65

ACCESSION NR: AP5004427

3) Institute of Chemical Physics, Academy of Sciences USSR. Conjugated polymers, with emphasis on organic semiconductors, and polymerization in the solid state.

4) Institute of Petrochemical Synthesis im. A. V. Topchiyev, Academy of Sciences SSSR. Physicomechanical properties of polymers, with emphasis on crystalline and supramolecular structures.

5) Institute of Petrochemical Synthesis and Institute of Organoelemental Compounds. Synthesis of dodecanedioic acid as a substitute for the scarce sebacic acid.

6) Institute of Physicoorganic Chemistry, Belorussian Academy of Sciences. Cyclic monomers.

7) Institute of Silicate Chemistry im. I. V. Grebenshchikova. Academy of Sciences SSSR. Heat-resistant organosilicate materials; new protective inorganic coatings.

Other subjects represented included: high-purity materials; radiation-induced polymerization; modern physicochemical research methods and instrumentation; and glass ceramics (Sitalls) and high-melting nonoxygen compounds, with emphasis on their high melting point, hardness, and other valuable properties. Orig. art. has: 8 figures.

Card 2/3

L 21821-65
ACCESSION NR: AP5004427

0

ASSOCIATION: none

SUBMITTED: 00

ENCL: 00

SUB CODE: GC, GO

NO REF SOV: 000

OTHER: 000

FSB v. 1, no.2

Card 3/3

SOBOLEVA, L.Ye.

Method of tattooing for studying the surface growth in iris floral shoots. Izv. AN Turk. SSR. Ser. biol. nauk no.3: 84-85 '65. (MIRA 18:9)

1. Botanicheskiy sad AN Turkmenskoy SSR.

SOBOLEVA, M.I.

"Vitaminizing of Food Concentrates." Theisi for degree of Cand. Technical Sci. Sub 10 June 1949. Moscow Inst. of Soviet Cooperative Trade

Summary 82, 18 Dec. 52, Dissertations Presented for Degrees in Science and Engineering in Moscow in 1949. From Vechernyaya Moskva, Jan- Dec. 1949.

DIKKER, G.L.; DRUZHININA, L.N., kand. tekhn. nauk, dots.; ISKENDEROV, A.A., kand. tekhn. nauk, dots.; KLYUYEVA, T.K., kand. tekhn. nauk, dots.; LOGOTKIN, I.S., kand. tekhn. nauk; MEL'MAN, M.Ye., kand. tekhn. nauk, dots.; MISNIK, I.A.; kand. tekhn. nauk; RUSH, V.A., dots.; RUKOSUYEVA, A.N., dots., red.; KAFKA, B.V., prof., retsenzent; FERTMAN, G.I., dots., retsenzent; SOBOLEVA, M.I., dots., retsenzent; BUDNITSKAYA, R.S., kand. tekhn. nauk, retsenzent; VOLKOV, Ye.N., kand. tekhn. nauk, retsenzent; AREF'YEV, I.I., inzh., retsenzent; KHARITONOV, A.F., retsenzent; GUREVICH-GUR'YEV, Ye.S., retsenzent; KUZ'MINSKIY, M.M., retsenzent; INIKHOV, G.S., prof., retsenzent; KHOMUTOV, B.I., dots., retsenzent; BORODINA, Z.N., dots., retsenzent; BORISOVA, G.A., red.; MEDRISH, D.M., tekhn. red.

[Starch, sugar, honey, confectionery products, condiments, fats, milk, and milk products] Khrakhmal, sakhar, med, konditerskie, vkusovye tovary, zhiry, moloko i molochnye produkty. Moskva, Gos. izd-vo torg. litry, 1961. 750 p. (MIRA 14:7)

(Food industry)

VIL'CHUR, O.M., prof.; YEFIMOV, V.V., prof.; LEPEKHINA, L.P., kand.med.
nauk; SOBOLEVA, M.S.

Clinical and electrophysiological paralells in patients with so-called mild closed cerebrocranial injures (concussion of the brain). Khirurgiia 36 no.11:96-102 N '60. (MIRA 13:12)

1. Iz TSentral'nogo instituta travmatologii i ortopedii (dir. - deystvitel'nyy chlen AMN SSSR prof. N.N. Priorov) Ministerstva zdravookhraneniya SSSR.

(BRAIN—CONCUSSION) (ELECTROENCEPHALOGRAPHY)

ACC NR: AP7003144 (N) SOURCE CODE: UR/0080/66/039/012/2820/2821

AUTHOR: Markovskiy, L. Ya.; Soboleva, M. S.

ORG: none

TITLE: Synthesis of gallium and indium selenides by selenite reduction

SOURCE: Zhurnal prikladnoy khimii, v. 39, no. 12, 1966, 2820-2821

TOPIC TAGS: chemical reduction, selenite reduction, indium selenide, gallium selenide, inorganic synthesis

ABSTRACT:

Application of the method of selenite reduction by hydrogen for preparation of stoichiometric indium selenide, In_2Se_3 and gallium selenide, Ga_2Se_3 has been studied in connection with the development of this method for preparation of the selenides of II—IV group metals. Stoichiometric In_2Se_3 and Ga_2Se_3 were obtained by reduction with a hydrogen-hydrogen selenide mixture of $In_2O_3 \cdot 3.6SeO_2 \cdot 4H_2O$ and $Ga_2O_3 \cdot 3.5SeO_2 \cdot 4H_2O$ at 500—600C. Only stoichiometric In_2Se_3 was prepared by reduction of the corresponding selenite with pure hydrogen at 350C under specified conditions. Hydrogen reduction of gallium selenite at 300—600C produced, regardless of duration, only impure gallium selenide contaminated with gallium oxides. Orig. art. has: 2 tables.

SUB CODE: 07/ SUBM DATE: 04Dec65/ ORIG REF: 011/ OTH REF: 003/ ATD PRESS: 5112

UDC: 546.681'682'23

Card 1/1

ARIYA, S.M.; SOBOLEVA, M.S.

Lattice energies of oxides. Fiz.tver.tela 3 no.10:3157-3161 0 '61. (MIRA 14:10)

1. Leningradskiy gosudarstvennyy universitet imeni A.A.Zhdanova.
(Oxides) (Crystal lattices)

SOBOLEVA, M.S.; VASIL'YEV, Ya.V.

Enthalpy of the formation of nickel telluride $NiTe_{1.00}$ - $NiTe_{1.50}$. Vest. LGU 17 no.16:153-155 '62. (MIRA 15:9)
(Nickel telluride) (Enthalpy)

37084
S/076/62/036/004/011/012
B101/B110

11.5100

AUTHORS: Vasil'yev, Ya. V., and Soboleva, M. S.

TITLE: Calorimeter for determining the heat of high-temperature processes (Methods for exact determination of the electric current power)

PERIODICAL: Zhurnal fizicheskoy khimii, v. 36, no. 4, 1962, 907-910

TEXT: This study was conducted according to a proposal by S. M. Ariya. A calorimeter with d.c. heated furnace is described. Measurement of the power is based on the use of Ф-117/11 (F-117/11) photoelectric amplifier which controls a semiconductor triode. The voltage of the heating current is stabilized, deviation of the amperage as a function of time is recorded. The power is calculated from $A = I_{mean} U_{stab} t$. I_{mean} is determined by graphic integration. The most essential parameters of the device are: stabilization coefficient 4000, output voltage 4-8 v lower than input voltage, maximum current 12 a, stabilization time 0.04 sec. With a nichrome heater, the error amounts to ± 0.03% in the first 15 to 20 sec.

X

Card 1/2

L 51844-65 EWT(m)/EWG(m)/EWP(t)/EWP(b) IJP(c) RDW/JD/JG

ACCESSION NR: AP5011809 UR/0080/65/038/004/0717/0720

546.23+546.65 18

16

B

AUTHOR: Markovskiy, L. Ya.; Soboleva, M. S.; Sapozhnikov, Yu. P.

TITLE: Preparation of rare earth selenides by reduction of selenites 27

21

SOURCE: Zhurnal prikladnoy khimii, v. 38, no. 4, 1965, 717-720

TOPIC TAGS: rare earth compound, selenide, lanthanum compound, cerium compound, praseodymium compound, gadolinium compound, neodymium compound, reduction method

ABSTRACT: Selenites of lanthanum, cerium, praseodymium, neodymium, samarium, and gadolinium were reduced with a mixture of hydrogen and hydrogen selenide at 600°C, forming selenides of the general formula M_2Se_3. Hydrogen selenide was used to minimize the formation of oxyselenides, which were present in the reaction products when hydrogen alone was used. X-ray phase analysis of all products showed various selenide phases in the case of each rare metal. The powder figures for lanthanum and samarium polyselenides had the same system of lines and nearly the same intensities, but differed in interplanar distances. Such distances for the powder patterns of polyselenides of cerium and the other rare earth elements occupy an inter-

Card 1/2

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ACCESSION NR: AP5011809

2

mediate position between the polyselenides of lanthanum and samarium. The patterns for sesquiselenides are very similar to those of the corresponding polyselenides. A comparison of the experimental interplanar distances with those in the literature shows contradictions. The proposed method is suitable for the preparation of high-purity rare earth selenides which can be used as semiconductors and luminescent materials. "In conclusion, the authors express their gratitude to Yu. D. Kondrashev for assistance in taking the powder patterns and for a number of valuable suggestions." Orig. art. has: 1 figure, 2 tables.

ASSOCIATION: Gosudarstvennyy institut prikladnoy khimii (State Institute of Applied Chemistry)

SUBMITTED: 21May63

ENCL: 00

SUB CODE: IC

NO REF SOV: 004

OTHER: 006

Card 2/2

ANDROSHCHUK, V.M.; SOBOLEVA, M.V.

Carbonitriding automobile parts in a nonmuffle furnace by means of sootless carburizers. Metalloved. i term. obr. met. no.7:54-56 Jl '61. (MIRA 14:6)

1. Iz opyta Kremenchugskogo avtozavoda.
(Furnaces, Heat treating)
(Case hardening)

SOBOLEV, N.D.; SOBOLEVA, M.V.

New manifestation of crocidolite-asbestos. Min.syr'e no.3:107-109 '63. (MIRA 17:9)

SOBOLEVA, Mariya Vladimirovna; PUDOVKINA, Irina Alekseyevna; GERASIMOVSKIY, V.I., redaktor; NIKITINA, V.N., redaktor izdatel'stva; KRYNOCHKINA, K.V., tekhnicheskiy redaktor

[Uranium minerals; a collection of articles] Mineraly urana; spravochnik. Moskva, Gos. nauchno-tekhn. izd-vo lit-ry po geol. i okhrane nedr, 1957. 407 p. (MLRA 10:4)

(Uranium)

SOBOLEV, N.D.; SOBOLEVA, M.V.

Genetic types of amphibole-abestos deposits. Raved. i okh. nedr 26 no.2:1-9 Feb. '60. (MIRA 14:6)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut mineral'nogo syr'ya.

(Amphibole) (Asbestos)

SOBOLEVA, M.V., mladshiy nauchnyy sotrudnik

Determination of alluvial plain erosion from data of laboratory studies. Trudy Gidrav.lab.VODGEO no.8:82-90 '62. (MIRA 15:11)
(Erosion) (Hydraulic structures)

PANKINA, A.Ya., inzh.; SOBOLEVA, N.A., inzh.

Efficacity of the installation of a "Statik" device on a carding machine. Tekst.prom. 22 no.9:51-53 S '62. (MIRA 15:9)

1. Nachal'nik nauchno-issledovatel'skoy laboratorii Glukhovskogo khlopchatobumazhnogo kombinata imeni Lenina (for Pankina).
2. Nauchno-issledovatel'skaya laboratoriya Glukhovskogo khlopchatobumazhnogo kombinata imeni Lenina (for Soboleva).
(Carding machinery) (Electrostatics)

SOBOLEVA, N. A.

AUTHOR: Soboleva, N.A. 109-3-5/23

TITLE: Accuracy of the Spherical-condenser Method
(O tochnosti metoda sfericheskogo kondensatora)

PERIODICAL: Radiotekhnika i Elektronika, 1958, Vol.III, No.3,
pp. 339 - 344 (USSR).

ABSTRACT: The method has been employed in the investigation of the secondary electron emission and photo electron emission for over 30 years, but it appears that no serious attempts have been made to evaluate its accuracy. The inaccuracies which arise when employing the method are due to the non-uniformity of the potential of the investigated (especially semi-conductors) cathodes and to the deviations of the cathode from a perfect, spherical shape. The inaccuracies due to the imperfections of the cathode shape are investigated in the present work. For this purpose, an electrolytic tank was employed with a model of the device and it was used to construct the trajectories of the electrons. The trajectories for a model with a spherical cathode are shown in Fig. 1 for electrons having various initial angles. Fig. 2 shows the trajectories for a system with a cubic cathode, the dimension of the cube being one-tenth of the diameter of the outer sphere. Figs. 3
Card1/2 show the electron trajectories for a disc-like cathode, the

Accuracy of the Spherical-condenser Method 109-3-5/23

diameter of the disc being either 0.1 or 0.05 of the diameter of the outer sphere. Additional electron trajectories are shown in Fig.4, where the cathode is in the form of a convex disc, having a diameter of 0.1 of the diameter of the sphere. From the above, it is concluded that the substitution of a spherical electrode by a flat one or a cubic one, even if its dimension is one-tenth of the diameter of the outer sphere, leads to inaccuracies of the order of 20 or more %. This is mainly due to the fact that not all the electrons are caught by the collector. The inaccuracy can be reduced by increasing the ratio of the collector/cathode dimensions; alternatively, it is possible to increase the accuracy by reducing the size of the irradiating spot. Also, a considerable increase in the accuracy can be secured by employing a convex disc cathode. There are 4 figures and 7 references, 5 of which are Russian and 2 English.

SUBMITTED: February 13, 1957

AVAILABLE: Library of Congress

Card 2/2

AUTHOR: Soboleva, N. A. 48-22-5-13/22

TITLE: Examination of Photo-Cathodes by Using Radioactive Indicators (Issledovaniye fotokatodov metodom radioaktivnykh indikatorov) Data on the VIII All Union Conference on Cathode Electronics, Leningrad, October 17-24, 1957 (Materialy VIII Vsesoyuznogo soveshchaniya po katodnoy elektronike, Leningrad, 17-24 oktyabrya 1957 g.)

PERIODICAL: Izvestiya Akademii Nauk SSSR, Seriya Fizicheskaya, 1958, Vol. 22, Nr 5, pp. 576 - 579 (USSR)

ABSTRACT: A considerable spread concerning the conductivity of the layer and the character of fatigue is exhibited by thin cesiumoxide-cesium photocathodes. In examining the latter 3 groups of cathodes can clearly be distinguished: a) such which do not get fatigued, b) such which get fatigued only slightly, c) such which get fatigued rapidly in one working phase. A general description of the cathodes concerned is given. In the present paper Cs_{134} was used as an indicator by the author. An test device plus counter is shown in figure 1. Figure 2 shows one of the curves resulting from a change of the pulse rate on the

Card 1/3

Examination of Photo-Cathodes by Using Radioactive Indicators 48-22-5-13/22

cathode during its activation. From this can be seen that the beginning of the cesium-inflow to the cathods coincides with the rise of the thermo electric current. After this current has reached its maximum, an effect like a cesium saturation of the cathode can be noticed. After an additional evaporation of silver onto the cathode and a thorough heating its activity falls by further lo-15%, after it was reduced by about 2o% by pumping off cesium vapor. It can be concluded from these measurements that the activation process of the cathode does not depend on the initial quantity of cesium; after activation 8o-95% of this amount remains in the ampulla. Out of the cesium quantity used for the activation process only from lo-15% are condensed in the glass tube, the remainder is pumped off into the system. To work out the cesium distribution the glass tube is cut according to single elements into narrow rings. The averaged results of impulse rates on the surface of the individual rings are shown in figure 3. Cesium is chiefly adsorbed by the glass on the spots adjoining the cathode (as in reference 1). Further the content of cesium in the cathodes was determined. The cathodes with a thickness of a primary silver layer, corresponding

Card 2/3

Examination of Photo-Cathodes by Using Radioactive Indicators 48-22-5-13/22

to 3-4 mg cm^{-2} contained 6-8 mg cm^{-2} cesium. A relation between the quantity of cesium and resistance of the layers was not determined. Even at a severe fatigue (up to 100 hours) it can be assumed that the quantity of cesium on the cathode remains unchanged. Also at a heating up to 150°C the impulse rate is not modified. The results stated above are only preliminary data obtained by methods, the possibilities of which are by no means exhausted. In the discussion on this paper N. D. Galinskiy, N. D. Morgulis and the author took part. There are 3 figures and 1 reference, 0 of which are Soviet.

ASSOCIATION: Moskovskiy energeticheskiy institut (Moscow Institute for Power Engineering)

1. Cathodes (Electron tubes)--Properties 2. Cathodes (Electron tubes) --Fatigue 3. Cesium isotopes (Radioactive)--Applications

Card 3/3

AUTHOR: Soboleva, N.A. SOV/109-4-1-30/30

TITLE: Reply to the Letter to the Editor entitled "Accuracy of the Spherical Condenser Method" by D.A. Ganichev and K.G.Utkin (Otvet na pis'mo v redaktsiyu D.A. Ganicheva i K.G. Utkina "O tochnosti metoda sfericheskogo kondensatora")

PERIODICAL: Radiotekhnika i Elektronika, 1959, Vol 4, Nr 1, pp 148 - 149 (USSR)

ABSTRACT: N.A. Soboleva is of the opinion that the authors of the above letter are right in concluding that the electron trajectories were determined inaccurately. She points out, however, that the experimental errors of her work do not disqualify the value or the main results of the work.

SUBMITTED: July 6, 1958

Card 1/1

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L 12039-65 EWT(l)/EWG(k)/EWT(m)/EPA(sp)-2/EPF(n)-2/EPA(w)-2/T/EWA/EWP(b)
Pz-6/Pab-10/Pu-4 IJP(c)/BSD/ASD(f)-2/AEDC(a)/AFETR/SSD/AFWL/RAEM(i)/ESD(gs)/
ACCESSION NR: AP4045299 ESD(t) JD/JG/AT S/0048/64/028/009/1454/1460

AUTHOR: Soboleva, N.A.; Korolev, V.Ye.; Shefov, A.S.

TITLE: Investigation of the residual gas composition in vacuum tubes with multi-alkali cathodes [Report, Tenth Conference on Cathode Electronics held in Kieve 11-18 Nov 1963]

SOURCE: AN SSSR. Izvestiya. Seriya fizicheskaya, v.28, no.9, 1964, 1454-1460

TOPIC TAGS: photocathode, fatigue, gas absorption, gas formation, mass spectrometry, aging

ABSTRACT: The composition of the residual gas in vacuum tubes containing multi-alkali cathodes was determined as part of an investigation of the processes of aging and fatigue in these tubes. An omegatron, a high frequency magnetic mass spectrometer with a sensitive element of small volume, was employed. A number of difficulties were encountered in the measurements, and these, and the means by which some of them were partly overcome, are discussed at length. The multi-alkali cathodes proved to be excellent gas absorbers, and special means (e.g. a titantium getter) had to be employed to improve the vacuum in the sensitive element of the omegatron.

1/3

L 12039-65
ACCESSION NR: AP4045299

The alkali metal vapor pressure could not be measured with the omegatron; it was, indeed, necessary to protect the omegatron from alkali metal[27] vapor during the preparation of the cathodes. The principal constituents observed in the residual gas were N_2, CO, CH_4, A, Ne and sometimes CO_2 and H_2O. The active gases CO, CO_2, H_2O and CH_4 were strongly absorbed by the photocathode with an accompanying change (usually deleterious) in sensitivity. The loss in sensitivity during storage was found to be accompanied by a decrease in the pressure of these gases. Any operations that led to an increase in the pressure of the active gases (and these included sealing off the glass stem) led also to reduction of the photocathode sensitivity. Applying a potential to the electrodes without drawing a current produced only a small change in the composition of the residual gas. When current was drawn, the H_2O and CH_4 pressures increased reversibly. It is suggested that the evolution of these gases may be due to local heating of the cathode by the photocurrent. It is concluded that at least one reason for the loss of sensitivity of multi-alkali photocathodes during storage is the gradual absorption of CO, CO_2, H_2O and CH_4 by the cathode, but that these gases are not involved in the fatigue process. It is suggested that fatigue may be due to a redistribution of the alkali metals between the cathode and other parts of the instrument. Orig.art.has: 3 figures and 1 table.

2/3

L 12039-65
ACCESSION NR: AP4045299

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ASSOCIATION: none

SUBMITTED: 00

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SUB CODE: EC, GP

NR REF SOV: 001

OTHER: 000

3/3

SOBOLEVA, Nina Aleksandrovna; BERKOVSKIY, Arkadiy Grigor'yevich; CHECHIK, Noson Osherovich;YELISEYEV, Reyngol'd Yevgen'yevich; ZERNOV, D.V., red.; CHEBOTAREVA, A.V., red.

[Photoelectronic instruments] Fotoelektronnye pribory. Moskva, Nauka, 1965. 592 p. (MIRA 18:12)

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ACC NR: AM6016147

Monograph

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Soboleva, Nina Aleksandrovna; Berkovskiy, Arkadiy Grigor'yevich; Chechik, Noson Osherovich; YEliseyev, Reyngol'd YEvgen'yevich

Photoelectronic devices 15 (Fotoelektronnyye pribory) Moscow, Izd-vo "nauka", 65. 0592 p. illus., biblio., index. 11,000 copies printed.

Series note: Fiziko-matematicheskaya biblioteka inzhenera

TOPIC TAGS: photoelectric cell, photoconductive cell, photoelectric effect, photoelectron multiplier, photodiode, phototransistor

PURPOSE AND COVERAGE: The book presents basic information on the present state of physics of electronic processes occurring in photoelectronic devices, and describes the design, parameters, and characteristics of these devices. The book is intended for engineers and scientific personnel developing and using photoelectronic devices, and for graduate and undergraduate students at corresponding departments of institutions of higher learning.

TABLE OF CONTENTS (abridged):

Foreword -- 5

Ch. I. Introduction -- 7

Card 1/2

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L 08506-67

ACC NR:

AM6016147

Ch. II. Physical principles of photoelectric effect -- 27

Ch. III. Photomissive cells -- 102

Ch. IV. Photomultipliers -- 203

Ch. V. Photoconductive cells -- 392

Ch. VI. Barrier-layer cells -- 483

Ch. VII. Photodiodes and phototransistors -- 557

Bibliography -- 588

Subject index -- 589

SUB CODE: 09 SUBM DATE: 20Nov65/ ORIG REF: 154/ OTH REF: 090

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